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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/070,055	05/29/2002	Jukka Holm	297-010857-US (PAR)	9137
2512	7590	07/09/2004	EXAMINER	
PERMAN & GREEN 425 POST ROAD FAIRFIELD, CT 06824			FOSTER, ROLAND G	
			ART UNIT	PAPER NUMBER
			2645	

DATE MAILED: 07/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/070,055

Applicant(s)

HOLM ET AL.

Examiner

Roland G. Foster

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 December 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 33-64 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 5,33 and 52-60 is/are rejected.
- 7) ☒ Claim(s) 51 and 61-64 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>3 & 8</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 33, 47, and 60 are rejected under 35 U.S.C. 102(b) as being anticipated by Published European Patent Application No. EP 0 777 208 A1 to Masatada Wachi (hereinafter "Wachi"), of record.¹

Wachi discloses score information describing presentation instructions of an audible signal and an instrument information part describing the parameters for synthesizing instructions described by the score information part. Specifically, Wachi discloses a method for transferring audio characteristics to terminal equipment (col. 1, line 26 – col. 4, line 19) optimally in dependence of user system characteristics (col. 1, line 46-50). In that purpose, audio characteristics are divided into first and second data in an embodiment of Wachi, the first data being automatic performance sequence data (notes and tone generation timing, i.e., scoring information) and the second data being wave form and tone generation program data necessary for reproduction of individual tones (col. 2, line 24-59). When music is played back,

¹ The prior art reference Wachi was disclosed by the applicant and has been repeatedly cited and applied in earlier PCT reports for the parent PCT case. Thus, the prosecution of the instant 371 U.S. application will begin by applying Wachi in a similar manner for the sake of consistent prosecution (at least initially).

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"predetermined processing is executed on the basis of the first data, but for complete execution of the...process, it is necessary for the second data to be possessed by or stored in the storage section" (col. 2, lines 35-45). Thus, the tone generation program data contained in the second data uses the tone generation timing data contained in the first data in order to accomplish "complete" execution of the predetermined process. The first data corresponds to score information and the second data corresponds to the instrument information part since the second data describes parameters for synthesizing an audible signal to desired tonal qualities (instrumental nature), the presentation instructions (scoring) of which is described by the first data. Thus, the instrument information describes parameters for synthesizing an audible signal the presentation instructions of which is described by the score information part.

Wachi also discloses providing compatibility information if the score and instrument part with processing and storing capacity and, in response to a selection command, downloading the score and instrument information part into terminal equipment through a communications network. Specifically, the first and second data may be fully or partly present at the terminal playing the audio piece (col. 2, lines 24-59). Upon a selection command (col. 12, lines 7-59), a request for transfer of all the audio data or part thereof may be initiated for instance upon determination that some necessary second data is not loaded in the storage section of the terminal where the piece is to be played (col. 2, line 49-59). This determination may be performed either by the terminal where the piece is to be played or by a processor of the data supply section containing all the relevant audio data. Clearly, that transfer is performed (i.e., downloaded)

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through a communication network (col. 1, lines 51-58). As expressly indicated in col. 10, lines 5-30, various processes may be executed on the basis of user profile information, this user profile information comprising user system information. This user system information includes in turn memory information such as capacity of the memory of the terminal device, CPU information, which corresponds to processing capacity, and OS information, which is clearly necessary for compatibility checks. As indicated in col. 18, line 15 – col. 19, line 45, selection of audio data takes into account compatibility with the terminal it is to be used on and memory capacity constraints.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 34-44, 46, and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wachi as applied to claims 33 above, and further in view of U.S. Patent No. 5,734,119 to France et al. (hereinafter "France"), of record.

Claims 34-39 are substantially directed to the transmission of the sound information to the terminal equipment and the implementation choice for storing and selecting the sound information. Transmission of sound information is performed using a common sound packet structure, storage (some of which may be generic), and selection of sound information is implemented using a database. Claim 3 additionally recites that the method can be used to transfer user interface sound information parts.

Wachi discloses using databases and a detailed terminal user interface to store and select sound information on the basis of user information (e.g., Figs. 8-19). However, Wachi fails to disclose using a common sound packet structure.

France teaches using a so-called MDF format to transmit audio data comprising both presentation instructions of an audible signal and parameters for synthesizing such a signal (Fig. 6, col. 19, line 22 – col. 20, line 11). All this information is encapsulated in a single common structure.

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Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to add a single common structure as taught by France to the transmission of sound information disclosed by Wachi. In addition, efficiency and bandwidth reduction would have occurred by using the MDF format of France, would accurately but efficiently compresses the large data files associated with music downloads (col. 6, lines 1-50)

The suggestion/motivation for doing so would have been to conform to industry standards for transmitting audio information such as the MIDI formats disclosed by France, where both standard MIDI and non-standard MIDI information is encapsulated in a common structure (standard MIDI information may be arbitrarily referred to as the generic audio party).

Claims 40-44, 46, and 48 are substantially directed to both score information subparts and instrument data subparts corresponding to particular instruments and using well known standards or formats (e.g., MIDI and MPEG) for formatting and transmitting both the score and information part and the instrument information part.

Wachi discloses score subparts (e.g., col. 7, line 41 – col. 8, line 59). However, Wachi fails to disclose, but France teaches using instrument information to allow simulating real instruments by distinguishing standard and non-standard MIDI information thereby allowing loading instrument information (and score subparts) associated to new instruments into the

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terminal equipment (i.e., different instrument information subparts for different instruments) (e.g., Fig. 2, Fig. 3, step S77).

Therefore, it would have been obvious to add differing instrument subparts as taught by France to Wachi.

The suggestion/motivation for doing so would have been to increase flexibility, accuracy, and versatility of musical playback by simulating the use of differing instruments. For example, Wachi distinguishes between standard and non-standard MIDI information in order to allow loading instrument information associated with new instruments thereby flexibly but accurately rendering the downloaded music.

With respect to specific formats such as Rich Music Format and MPEG-4 and the use of encryption, "Official Notice" is taken that both the concept and advantages of using well known formats or standards such as Rich Music Format, MPEG-4, and/or digital video broadcasting would have been well known and expected in the art.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time to add industry standard formats such as Rich Music, MPEG-4, and/or digital video broadcast to the method for transferring audio data disclosed by Wachi.

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The suggestion/motivation for doing so would have been to use industry standards formats for reliably, efficiently, and accurately transferring audio data, such as Rich Music, MPEG-4, and digital video broadcast.

Claims 45 and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wachi as applied to claim 33 above, and further in view of U.S. Patent No. 5,931,901 to Wolfe et al. (hereinafter "Wolfe"), of record.

Wachi fails to disclose, but Wolfe teaches of transferring audio information using encryption (col. 2, lines 17-67).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to add encryption as taught by Wolfe when transferring the audio message disclosed by Wachi.

The suggestion/motivation for doing so would have been to increase security and privacy (e.g., see Wolfe, col. 2, lines 25-30).

Claims 50, 51, 53-55, and 57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wachi in view of Published European Patent Application No. EP 0 837 451 A1 to Knsuke Ide (hereinafter "Ide"), of record.

The claims differs substantively from claim 33 in that claim 50 recites additional limitations directed to synchronized, multiplexing of the instrument information part, the score information part, and/or compatibility information part in a digital information stream for broadcast and provision of a piece of selection information to the terminal equipment.

Wachi discloses of transmitting the information, score, and/or compatibility part as discussed in the claim 1 rejection above. Wachi fails to disclose, but Ide teaches of the synchronized, multiplexing audio data with other types of data whereby it is extracted at user terminal for replay using synthesizers (page 2, line 30 – page 4, line 11; page 6, line 8 – line 24).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to add the synchronized multiplexing during broadcast the audio data disclosed by Wachi as taught by Ide.

The suggestion/motivation for doing so would have been to increase the efficiency of information transmission because multiplexing allows more efficient allocation of bandwidth, as is well known in the art. Further, using digital broadcast to transfer different types of audio data and compatibility data does not imply any other effects than the effects achieved by efficiently broadcasting audio data as shown by Ide and the effect achieved in the transmission format disclosed by Wachi.

Claim 56 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wachi in view of Ide as applied to claim 50 above, and further in view of France. See the Wachi in view of France rejection above for further details.

Claims 58 and 59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wachi in view of Ide as applied to claim 50 above, and further in view of Wolfe. See the Wachi in view of Wolfe rejection above for further details.

Allowable Subject Matter

Claims 52 and 61-64 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 52 is directed to producing mutually different sound packets by selecting a certain score information part and a certain instrument information part into each sound packet.

Claim 61 is directed to forming common database structure where each score information part is associated with at least one instrument information part and where compatibility

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information is arranged to describe the compatibility of each sound packet with certain processing and storing capacity.

The closest prior art of record is Wachi as applied above, however Wachi fails to disclose the feature described above.

The remaining prior art of record fails to teach or fairly suggest the obviousness of substantially modifying Wachi in order to arrive at the invention as claimed in detail by the applicant.

The above reasons for allowance are based on the claims as presently set forth in their totality. The above reasons for allowance should not be interpreted as indicating that amended claims broadly reciting certain limitations discussed in the above reasons for allowance would be allowable. A more detailed reasons for allowance may be set forth in a subsequent Notice of Allowance if and when all claims in the application are put into a condition for allowance.


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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Roland Foster whose telephone number is (703) 305-1491. The examiner can normally be reached on Monday through Friday from 9:00 a.m. to 5:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fan S. Tsang, can be reached on (703) 305-4895. The fax phone number for this group is (703) 872-9309.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to customer service whose telephone number is (703) 306-0377.



Roland G. Foster
Primary Patent Examiner
June 28, 2004